Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use	)	ET Docket No. 94-32

REPLY COMMENTS OF
IN-FLIGHT PHONE CORPORATION

While numerous commenters share In-Flight Phone Corporation's ("In-Flight") view that the Communications Act of 1934, the National Telecommunications and Information Administration Organization Act and the Administrative Procedure Act prevent the Commission from allocating spectrum to the Fixed and Mobile Service ("FMS") as proposed by the agency, a review of the record evidence reveals a further legal infirmity with the Commission's FMS proposal. Under legal precedent, the Commission may not lawfully adopt a regulatory policy in any informal rulemaking (such as a spectrum allocation proceeding) based on findings that are inconsistent with the record evidence.[1/] While the record here contains substantial evidence that the proposed FMS is administratively unworkable, it contains not a shred of evidence that it is workable.

For example, not one commenter offers any suggestion for a way to determine which applications are mutually exclusive when numerous parties file applications for a license to serve the same

---

1/ See, e.g., McGregor Printing Corp. v. Kemp, 20 F.3d 1188 (D.C. Cir. 1994).

geographic area, but propose totally different technical characteristics. In fact, while numerous commenters pointed out specific problems with administering an FMS allocation, just one -- Pacific Bell Mobile -- offered the Commission any encouragement at all. But, Pacific Bell Mobile's comment is practically meaningless since it consists of a single sentence stating only that it "support[s] the Commission's intent to designate 2390-2400 MHz ... for ... [FMS]"[2/] without explaining how the Commission could lawfully allocate the band to FMS and without offering any proposals of how to make FMS allocation administratively workable.[3/]

With FMS plainly off the table, the Commission is left with making a decision to allocate the 2390-2400 MHz band to one of the four discrete services it proposed as alternatives to FMS. The comments by proponents of three of those services -- multipoint distribution service ("MDS"), wireless local loop ("WLL") and unlicensed Data-PCS ("Data-PCS") -- provide some of the best reasons for the agency to decline allocating the 2390-2400 MHz band to any of them and, instead, allocate the band to airline audio and

---

[2/] Comments of Pacific Bell Mobile Services at 1.

[3/] The Wireless Cable Association ("WCA") seems to support the FMS allocation for the 2402-2417 MHz and 4660-4685 MHz bands as long as the agency adopts appropriate interference protection requirements. However, WCA asks the Commission to consider allocating the 2390-2400 MHz band to unlicensed Data-PCS rather than FMS. Comments of WCA at 4-5. WCA does not advocate establishment of FMS on 2390-2400 MHz since the band will not accommodate the end user-to-transmitter return link service it advocates as one WCA member company states explicitly in its comments. See Comments of American Telecasting at 4-5.

video service ("AAVS"), the fourth discrete service proposed by the Commission.

First, although the Commission speculated in its Notice that the 2390-2400 MHz band might make a good MDS base station channel if, in another proceeding, the agency allocated an existing MDS base station channel to Data-PCS, both MDS and Data-PCS advocates flatly reject this in their comments. And no commenter supports it. According to both groups, the cost of moving an MDS licensee from an existing channel to the 2390-2400 MHz band outweighs the benefits of reallocating an existing MDS channel to Data-PCS.[4/]

Second, while AAVS can co-exist with the expanding use of co-channel amateur operations to which the band is already allocated, MDS, WLL and Data-PCS cannot.[5/] Thus, proponents of WLL readily admit in their comments here (as they have admitted in the past),

---

[4/] Comments of Apple at 5 ("[R]epresentatives of the computer industry, with Commission encouragement, have attempted to reach agreement with users of certain other bands near the existing unlicensed PCS allocation, under which the incumbent users would agree to relocate in return for a reasonable accommodation by Apple and other computer manufacturers. Unfortunately, however, these efforts have been unsuccessful"); Comments of WCA at 5 ("Based on informal discussions among WCA, proponents of unlicensed data PCS and the Commission's staff, it appears that the unlicensed data PCS community is unwilling to pay the several hundred million dollars necessary to seamlessly migrate current [MDS] users ... to other spectrum ...."). See also Comments of Wireless Holding at 3; Comments of Home Box Office at 4-5.

[5/] A large number of amateur proponents appear to share In-Flight's belief that AAVS and the amateur service can co-exist under a band sharing plan of the kind In-Flight has proposed. See Comments of AARL at 18-19; Comments of SCRRBA at 4; Comments of San Bernardino Microwave Society at 6; Comments of NARCC at 9; Comments of David R. Couch at 2; Comments of Amateur Television Network at 3.

that WLL cannot co-exist with the Amateur Service.[6/] Proponents of Data-PCS likewise recognize that their proposed service, if offered in the 2390-2400 MHz band, will interfere with existing amateur operations in that band. Thus, Compaq admits that "Data-PCS devices are marketable only if the spectrum allocated for the use is clear on a nationwide basis".[7/] Compaq also declares that if the Commission allocated the 2390-2400 MHz band to unlicensed Data-PCS, further growth of amateur radio services could not occur in the band.[8/] It is so patently obvious that MDS transmitters would preclude co-channel amateur operations in such a broad geographic area that MDS advocates do not even discuss MDS/amateur compatibility in their comments.

The efforts by WLL proponents to show a need for that service provide additional reasons not to allocate the 2390-2400 MHz band to WLL. For example, the vast majority of WLL proponents argue

---

[6/] See, e.g., Comments of Southwestern Bell at 7 ("Based on its continuing and further analyses, SWBT believes that it would be problematic for the paired 2390-2400 MHz and 2300-2310 MHz spectrum bands to be shared by amateur users and ... [WLL] without the potential for such shared use to cause unacceptable co-channel and adjacent channel interference to one of the services...."); Comments of TDS at 5.

[7/] Comments of Compaq at 4.

[8/] While Apple implies that it may be possible to develop a band sharing plan which amateurs and Data-PCS would find acceptable, it offers no specifics of this plan. See Comments of Apple at 1,4, 9-10. Moreover, any claim by Apple that such band sharing may be possible lacks credibility. Specifically, more than any other advocate of Data-PCS, Apple has consistently insisted in the past that no use other than Data-PCS be permitted in whatever bands are allocated to Data-PCS because of its belief that Data-PCS cannot coexist with any other use.

that such an allocation will be most useful in rural areas.[9/] Yet, the FCC already has allocated spectrum in the 450 MHz band for the provision of WLL in rural areas.[10/] Most WLL proponents do not even acknowledge this fact, but the few who do so, attempt to dismiss the existing 450 MHz WLL service as a substitute for 2390 MHz WLL on grounds that the 450 MHz WLL equipment is too expensive.[11/] However, these commenters offer no explanation for why it would be less costly to provide WLL on the 2390-2400 MHz band then on the 450 MHz band. This is not surprising since there is no reason to believe it would be less costly to make equipment to provide the service in the higher 2390-2400 MHz band. If anything, 2390 MHz WLL equipment would be more expensive than 450 MHz WLL equipment since equipment costs almost always increase as the operating band gets higher.

Moreover, Southwestern Bell is wrong when it states that allocation of the 2390-2400 MHz band to AAVS would not serve the broad public interest as would an allocation to WLL.[12/] As In-Flight previously stated in its comments, on an average day, there

---

[9/] See, e.g., Comments of U S West at 2-3; Comments of TDS at 1; Comments of Rochester Telephone at 2; and Comments of OPASTCO at 2.

[10/] See Basic Exchange Telecommunications Radio Service, 3 FCC Rcd 214 (1988) recon. 4 FCC Rcd 5017 (1989).

[11/] See, e.g., Comments of U S West at n. 7; Comments of Rochester Telephone at 2; and Comments of the OPASTCO at 3; Comments of TDS at 3.

[12/] See Comments of Southwestern Bell at 10.

are 1.36 million people who fly in the U.S. on commercial airlines[13/] who could potentially benefit from AAVS. In comparison, some of the rural areas in which proponents of WLL argue that the service will be of most value, have population densities of less than two people per square mile.[14/] And, unlike AAVS which would make an entirely new and valuable service available to airline travelers, the WLL proposed for the 2390-2400 MHz band is simply another way by which telephone companies can provide an existing service -- local telephone service.

A few WLL proponents argue by implication that the 2390-2400 MHz allocation is necessary for WLL in order to provide additional channel capacity for the existing 450 MHz WLL service.[15/] However, it is questionable that these commenters are really as concerned with a spectrum shortage for rural WLL as they would like the Commission to believe. USTA petitioned the Commission more than two years ago to amend its rules to open up additional 450 MHz channels to rural WLL, yet none of the commenters appears to have had any ex parte contact with the Commission at any time during this two year period to urge the agency to speed up the processing of the petition.[16/] If the telephone companies need additional

---

[13/] FAA Aviation Forecasts, Fiscal Years 1992-2003 at 208 Table 10 (FAA-APO 92-1).

[14/] See Comments of U S West at 2-3.

[15/] See, e.g., Comments of TDS at 3; Comments of OPASTCO at 3.

[16/] See USTA Petition for Rulemaking, RM-8159 (filed Nov. 9, 1992).

spectrum to serve rural areas as they suggest, one would expect that they would have lobbied the FCC rigorously during the past two years for a resolution of the USTA petition.

Nor do the local exchange companies who seem to decry a WLL spectrum shortage in rural areas explain why they cannot use a few megahertz from their 25 MHz cellular systems to provide WLL. The Commission long ago held that cellular licensees could use their cellular spectrum to provide WLL.[17/] It is inconceivable that cellular systems require all 25 MHz of cellular capacity to provide mobile service in rural areas, and no commenter here claims otherwise.

There also is no reason to believe that the Commission needs to allocate the 2390-2400 MHz band to WLL in order to provide sufficient channel capacity to provide the service in urban areas since the FCC soon will be awarding 10 MHz PCS licenses, and these licensees may provide WLL pursuant to these licenses. Southwestern Bell acknowledges this fact, but it seeks to dismiss it as an unrealistic alternative by noting that the FCC rules require construction of 10 MHz PCS systems more rapidly than it believes would be economically justified if the licensees were to provide WLL.[18/] However, Southwestern Bell conveniently fails to mention that the Commission stated in adopting the construction deadline

---

[17/] See Cellular Lottery Decision, 98 F.C.C. 2d 175, 194-5 (1984).

[18/] Comments of Southwestern Bell at 8.

for 10 MHz PCS licenses that it would waive the deadline when the licensee proposed to provide a service like WLL where a longer construction period is justified.[19/]

While the record fails to support an allocation of the 2390-2400 MHz band to FMR, MDS, Data-PCS or WLL, it supports an allocation to AAVS for the reasons that In-Flight described in its initial comments. We will not restate those reasons here, but we do want to correct two misimpressions about AAVS left by Claircom, one of the many commenters who speak favorably about AAVS. First, Claircom implies that In-Flight's AAVS proposal will not allow multiple, competing carriers to provide AAVS through different technologies.[20/] This is not true. Indeed, under In-Flight's proposal, the Commission would award two AAVS licenses, each authorizing operation on half of the 2390-2400 MHz band.[21/] Since each licensee would operate on its own 5 MHz band, there would be no need for AAVS licensees to utilize compatible equipment or be tied to a single technical standard. Rather, AAVS competitors would be free to develop and use their own unique technology to deliver their services. Moreover, Claircom claims that In-Flight's proposed service is deficient because it does not provide airline passengers with interactive (two-way) services between the air and

---

[19/] Amendment of the Commission's Rules to Establish New Personal Communications Services, 75 Rad. Reg. (P&F) 2d 491 at ¶ 156 (1994).

[20/] See Comments of Claircom at 6.

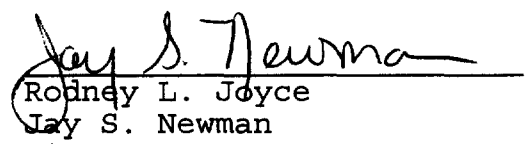
[21/] See Comments of In-Flight at 18.

ground.[22/] While it is true that In-Flight's proposal for the 2390-2400 MHz band does not involve a two-way broadband service, this does not mean that air-to-ground interactivity is permanently foreclosed. Indeed, the FCC could eventually allocate a separate band of spectrum at any time in the future to serve as the air-to-ground link of a two-way AAVS. At this time, however, most airlines are more interested in providing live programming to air travelers, than they are in offering two-way services.

The FCC should allocate the 2390-2400 MHz band to AAVS as proposed by In-Flight.

Respectfully submitted,

IN-FLIGHT PHONE CORP.

By: 

Rodney L. Joyce
Jay S. Newman
Ginsburg, Feldman and Bress
Chartered
1250 Connecticut Avenue, NW
Washington, DC 20036
202-637-9000

William J. Gordon
Vice President of Regulatory Affairs
In-Flight Phone Corp.
Suite 200
1146 19th Street, NW
Washington, DC 20036

Dated: January 6, 1995

[22/] See Comments of Claircom at 5. Although Claircom states that the public interest will be best served by an interactive service, Claircom fails to specify or suggest where the Commission could locate this service.